

**(Original)** 1. An anticonvulsant pharmaceutical composition for nasal administration having binding affinities for the receptor sites *viz.* GABA-A agonist site, Glutamate- AMPA site, Glutamate-Kainate site, Glutamate-NMDA agonistic site, Glutamate-NMDA glycine (strychnine insensitive) site and Sodium channel (site 2), comprising:

- i. an extract of the pericarp of the fruit of *S.trifoliatus*, comprising from 0.001 to 1.0 (% w/v) of hederagenin, and
- ii. pharmaceutically acceptable additives.

**(Original)** 2. An anticonvulsant pharmaceutical composition, for nasal administration according to claim 1, wherein extract comprises hederagenin in amounts of 0.004% to 0.08 (% w/v) of.

**(Original)** 3. An anticonvulsant pharmaceutical composition, for nasal administration according to claim 1, wherein the said extract is in the form of a lyophilized powder or an aqueous solution.

**(Original)** 4. An anticonvulsant pharmaceutical composition, for nasal administration according to claim 1, being suitable for prophylactic treatment of migraine, mediated through its anticonvulsant activity.

**(Original)** 5. An anticonvulsant pharmaceutical composition, for nasal administration according to claim 1 wherein the pharmaceutically acceptable additives, comprise agents for adjusting the tonicity; viscosity; pH and a preservative agent.

**(Original)** 6. An anticonvulsant pharmaceutical composition, for nasal administration according to claim 5 wherein the said agent for adjusting the tonicity, is sodium chloride.

**(Original)** 7. An anticonvulsant pharmaceutical composition, for nasal administration according to claim 5 wherein the said agent for adjusting the viscosity is selected from xanthan gum, carboxymethyl cellulose, methyl cellulose, hydroxypropyl methyl cellulose, polyvinyl pyrrolidone, polyvinyl alcohol and carbomers.

**(Original)** 8. An anticonvulsant pharmaceutical composition, for nasal administration according to claim 5 wherein the said agent for adjusting the pH is selected from citric acid, sodium citrate, potassium dihydrogen phosphate, acetic acid, sodium acetate and ammonium acetate.

**(Original)** 9. An anticonvulsant pharmaceutical composition, for nasal administration according to claim 5 wherein the said preservative agent is selected from chlorbutanol, phenyl ethyl alcohol and parabens.

**(Amended)** 10. An anticonvulsant pharmaceutical composition, for nasal administration according to ~~claims~~ claim 1 ~~or 9~~ wherein the pH, is in the range of between 4.5-6.5.

**(Amended)** 11. An anticonvulsant pharmaceutical composition, for nasal administration according to ~~claims~~ claim 1 ~~or 10~~ wherein the said composition is in the form selected from nasal drops, nasal sprays, nasal powders, semisolid nasal preparations, nasal washes, nasal sticks and the like.

**(Original)** 12. A process for preparation of an extract containing 4 to 8 % w/w of hederagenin, comprising the steps of:

a. extraction of the pericarp of the fruit of *S.trifoliatum* with water or an alcohol or a mixture thereof at ambient to boiling temperature for 0.5 to 24 hours,

b. lyophilization of the aqueous, alcoholic or aqueous alcoholic extract containing a mixture of saponins to give a lyophilized powder, containing a mixture of saponins, and

c. reconstitution of the lyophilized extract in water to achieve a concentration of hederagenin between 0.001 to 1.0 (% w/v).

**(Original)** 13. A process according to claim 12, wherein the alcohol is selected from a C<sub>1-4</sub> alcohol.

**(Amended)** 14. A process according to anyone of ~~claims~~ claim 12 ~~or 13~~ wherein the C<sub>1-4</sub> alcohol is methanol, ethanol, n-propanol, iso-propanol, n-butanol, iso-butanol and tert- butanol.

**(Original)** 15. A process for preparation of an anticonvulsant pharmaceutical composition comprising:

- i. adding lyophilized aqueous extract of *S.trifoliatius* as claimed in claim 12 to a mixture of Chlorobutanol and Phenylethyl alcohol in water and sodium chloride, to get a uniform dispersion,
- ii. filtering;
- iii. mixing above dispersion with dispersion of Xanthan gum in purified water;
- iv. adjusting the pH between 4.5-6.5.

**(Amended)** 16. An extract according to ~~claims~~ claim 1 ~~or 12~~ which exhibits *in vitro* receptor binding affinity towards specific receptors like GABA-A agonistic site, Glutamate NMDA agonistic site, Glutamate NMDA Glycine (strychnine insensitive) site and sodium channel (site 2) which have mediatory role in anticonvulsant effect.

**(Amended)** 17. An extract according to ~~claims~~ claim 1 ~~or 12~~ wherein the *in vivo* anticonvulsant activity in rat of Maximal Electroshock Seizure (MES) test model is exhibited by nasal administration.